

Introduction to Databases, ITU, Fall 2003

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Exercises on September 16

You are unlikely to be able to do all the exercises in two hours. Therefore you are encouraged to prepare at home, and use the exercises for those parts you find difficult.

1. Recall/reproduce the solution to G UW 2.1.1 we found at the lecture on September 9.
2. G UW 2.1.3, G UW 2.3.1.b). Convert the final E/R diagram to a relational database schema.
3. G UW 2.1.8. Convert the final E/R diagram to a relational database schema.
4. G UW 2.2.3.
5. G UW 2.4.4. Convert the E/R diagrams to relational database schemas.

To be handed in no later than September 26, 11.59 AM:

Note that the hand-in must be completed individually.

This is the first in a series of hand-ins in which you will be developing a relational database for a data set of your own choosing. You could, for example, develop a database related to some hobby or interest of yours.

Your database should be substantial, but not too big. In the E/R model your design should have 4-6 entity sets, and a similar number of relationships. (Note that relationships and entity sets that should be changed to attributes, as discussed in the lecture on September 9, do not count.) The E/R diagram should include different kinds of relationships (e.g., many-many and many-one), but is not required to use multiway relationships or weak entity sets, unless appropriate for your database.

1. Give a short description in words of your database. The description should be informal, but detailed enough to supply all details needed for data modeling.
2. Draw an E/R diagram for your database. Remember to indicate keys, multiplicity of relationships, referential integrity constraints, etc.